

TO THE PAUL LOCAL BOARD.

GENTLEMEN,

Inspection of the District.

I beg to present my report for the year 1892. During the year I have from time to time systematically inspected all parts of the district.

House to House visitation of Newlyn. (I)

In compliance with the provisions of the "Housing of the Working Classes Act," 1890, it is my intention to make a personal house-to-house visitation of the entire District. At Newlyn fair progress has been already made, and the investigation is still proceeding. I hope to complete this shortly, and will embody the results in an early special report. So far I have examined 303 houses in Street-an-Nowan, Jack lane, and the eastern part of Newlyn beyond the slip. This is nearly $\frac{1}{4}$ of the total number of houses in the district and in these I found that 1346 people—nearly $\frac{1}{4}$ of the total population of the district—are lodged. This makes an average of 4.442 inhabitants per house, and practically corresponds with the average (4.533) of the entire district.

(a) Room space.

The sleeping rooms were in number 712, an average of 2.35 per house. The average number of inhabitants per sleeping room comes out as 1.89. The inmates I have classified as (1) *10 years of age and over*—997, (2) *under 10 years*—349. If we roughly estimate the latter as requiring, speaking generally, half the room space of the former, we arrive at an average of grown persons per sleeping room equivalent to 1.645. The bedrooms vary widely in size, but are in many cases decidedly small, seeing the number of inmates they lodge.

(b) Courts and Closets.

With the view of estimating the possibility of sanitary improvements I have noted the number of houses with sufficient courtlet to allow, were other conditions favourable, of the placing of a pail closet. These are 104—about $\frac{1}{3}$ of the number of houses examined. I find that W.C.'s. already exist in 8 of these, and pail closets on the dry system in 21 others. Cesspits I found in 17 more. 257 out of 303 houses (84%) are altogether without closet accommodation. In the absence of a regular supply of water to the houses, I do not, as I pointed out in my last Annual Report, favour an increase in the number of water closets on existing premises. The houses in which they are at present found are near the sea, and all have exceptionally large roof areas as rain catchments to supply their tanks. Even thus, though I am told that they answer well (one is stated to have been in existence 7 years,) there would appear to be some risk of insufficient flushing in dry seasons. Subtracting from the 104 houses with court accommodation the 46 cases in which some form of closet accommodation was found, we come upon 58 premises on which space for the placing of a pail closet exists, but which are at present without convenience of any kind. But these courts are in many cases so completely under the eyes and nose of their neighbours' premises, or so shut in by adjacent properties and fish sheds, that I should hesitate to recommend the placing of pail closets in many. Still on some premises more favourably situated, they might no doubt be advantageously introduced.

Of the 17 cesspits mentioned above one has under my direction and the Inspector's supervision since been converted into a pail closet. 3 others, placed in gardens at a distance from all houses, may in the absence of present complaint and subject to future

consideration, should complications arise, be regarded as not insanitary arrangements. I have directed the Inspector to see that the others are properly filled in and converted into pail closets. His latest report to me shews that 3 of these have been abolished and that 2 others are being filled in.

Inn Urinals.

An indoor urinal at the "Union Inn", which appears to be well flushed, and did not seem a nuisance at the time of examination is recommended to the Inspector's notice as needing occasional inspection. A urinal in connection with the "Star Inn" but detached therefrom, which is without proper light and ventilation should either be condemned or taken over by your Board and properly lit, ventilated and cared for.

(c) Construction of the Houses.

With regard to the general laying out of the town I must refer you for the present to your Chairman's Report of Nov. 30th, 1891., and to my Annual Report for last year. "The houses are built promiscuously, often back to back, with only one entrance and not a spare foot of ground belonging to them." Those I have thus far examined are mostly of old construction but in good repair. They are often so shut in by others as to be shut out of sufficient air and light. Many are without spouting, but in most cases they appear to be tolerably dry. A few built on permeable soil are, however, damp.

(d) Drainage of Courts and lodgment of Refuse. Nuisances found on house premises.

Two cases of inefficient drainage of courts have been reported by me to the Inspector of Nuisances. One referred to premises partly occupied by a bakehouse, and was complicated by insufficient separation of house refuse, rendering the court uncleanly. Another case was brought by me to the notice of the Inspector in which a court was uncleanly, part of the house-refuse being lodged in an uncovered pail and the remainder indiscriminately thrown about. It is pleasing to report that on the large majority of premises examined the courts, as also the house interiors, were found to be in a good state of cleanliness, and that cases of inefficiency of Drainage were comparatively few. All seem to be provided with refuse-pails, but the majority of these I saw were unprovided with covers and did not seem to be sufficiently often cleaned. In this connection I would draw the attention of your Board to section 36 of the Public Health Act of 1875.

A case of a kitchen sink-pipe in Fore Street, said to be separately drained over cliff but emitting a foul odour, and 3 cases of water closets needing more complete ventilation (one handflushed and choked at time of inspection), have been likewise reported to the Inspector. The handflushed closet must be particularly closely watched from time to time. An ill lit latrine and a separate underground closet on premises belonging to the "Three Tuns Inn" proprietor has promised to abolish.

The Fradgan.—

The most crowded district I have as yet met with in the course of my house-to house visitation of Newlyn is that known as the Fradgan. In the double row to the west of the Post Office I found 19 houses with 37 sleeping-rooms and 105 inhabitants, classified as (1) *10 years of age and over*—70, (2) *under 10 years of age*—35. The averages here are—no. of inhabitants per house, 5.5; no. of sleeping rooms per house, 1.9; no. of inhabitants per sleeping room, 2.8; equivalent to an average of grown inhabitants per sleeping room of 2.365. 11 of the houses were without court accommodation, and all were without closet accommodation of any kind. A stable, with fowls, at 1 was reported to me as being occasionally a nuisance from imperfect cleaning. The Stable was locked and the owner and occupant were living away at the time of my inspection. I commend the matter to the attention of the Inspector of Nuisances.

The above averages, and the averages of Newlyn generally, so far as I have inspected it, point to close congregation of the inhabitants, but give no definite idea of the intensity of the same in particular instances. Thus at 12 Fradgan Row, 7 over 10 years of age sleep in 2 rooms; at 18, 6 over 10 and 2 under sleep in 2 rooms. At 8, I found that 7 over 10 years of age and 6 under together occupied 2 rooms of average size. This case I brought under the notice of the Inspector. Nothing appears to have been done.

At 15 I found 4 children (2 over 10 years of age), sleeping in a compartment of a room, almost without light and ventilation. The room was almost entirely divided into two parts by a high partition, and the part in which the children slept was without window, and received but a faint glimmer of light in its upper part from the window in the other division of the room. This also I brought to the notice of the Inspector. Since then the landlord has put in another window, and remedied the defect.

Urgent need of more and better Houses at Newlyn and of Bye-laws to regulate construction of same.

The opinion I have strongly formed as the result of my inspection is that more Houses are urgently needed near Newlyn. The demand being in excess of the supply rents are rising, and in the case of large families packing to the verge of overcrowding is common. It is in my judgement inadvisable to close existing houses, save where extremely unhealthy conditions are found, until such time as more and better house accommodation has been provided. To ensure that the construction of such houses should be brought to satisfy elementary hygienic principles bye-laws in accordance with sanitary legislation are a matter of first necessity. Each house should be dry in its foundations, and if built on permeable soil the wall footings should be on a base of good concrete at least 18 inches deep and extending to a distance of 6 inches on all sides beyond the footings. The house should have proper drainage, guttering, and spouting, with properly laid and substantial paving to any area or yard abutting on it. The admission of light and air and the exclusion of damp must be regarded, and we must have no more back to back houses without forecourts, no more houses completely overshadowed by their surroundings, no more houses in blind or labyrinthine alleys,—“houses built promiscuously, often back to back, with only one entrance, and not a spare foot of ground belonging to them.” Each house must have a separate open courtlet, with room for a closet and refuse pail.

Drainage at Newlyn. The County Drain.

The low-lying part of Street-an-nowan in the neighbourhood of the County Drain is insufficiently drained. This Drain, situated for the most part on almost a dead level, is badly laid, and near its entrance into Tolcarne Stream becomes a mere rivulet laying down a delta of mud. I have had to bring this Drain to the notice of our Inspector and of your Board during the year, chiefly in connexion with its occasional chokage by refuse thrown in. A marked improvement is noticeable in this respect, but it seems to me that the drain cannot be expected to act effectively unless (1) it be properly laid throughout, (2) a force be obtained by a fall behind or by other means. I have already expressed my opinion to you that the drainage of this part of the town, if it is to be effectual, must be considered as part of a general scheme which includes the rising ground behind. As to your duties in this respect see Section 15 of Public Health Act, 1875.

Two Drains that are Nuisances.

Two drains at Newlyn have been complained of to me as nuisances, and I have satisfied myself in each case as to the justice of the complaints—(1) the large iron pipe opening on the beach inside the Harbour near the eastern arm of the New Pier. A foul

foul odour arises from this at certain times under the noses of the fishermen, fish-buyers and harbour officials who are present at the landing of fish on the coming in of the boats. I would recommend that the whole question of the drainage of this part of Street-an-nowan be discussed by your Board at an early date, and that, if practicable, this pipe be relaid so as to open on the other side of the eastern arm of the Pier, outside the Harbour limits.

(2) The other nuisance complained of is due to a bolt opening on the rocks adjacent to Mr. Rawlings' property at Street-an-nowan. It has already been brought under the notice of your Board, and I understand that orders have been given to meet the case.

Water Supply.

Both in quantity and quality satisfactory. In my last Annual Report I referred to the contamination of North Corner Shoot. Early in the present year the pipes from Bellevue downwards were re-laid, and the water now appears to be constantly of good quality. I am glad to know that your Board is making arrangements to place a tank with tap at St. Peter's Hill "Well," where water is now drawn by the thoroughly objectionable practice of dipping in of private house-pails. The Peith Well at Farmer's Meadows and that above North Corner Shoot (where the same method obtains) also require protection from this and from surface impurities. In my last Annual Report I recommended that the Peith Well at Farmer's Meadows be cemented and covered. An old disused well in Hitchen's Court, Newlyn, needs protection. When I last saw it, less than a month ago, the cover was partly gone, and on the edge thereof rested a pail full of refuse. It is most important that the subsoil water should not be subject to contamination in this upper part of the town, seeing that in the lower parts it supplies much of the drinking water by means of surface wells.

Excrement Disposal. School Closets.

Two cesspits have been converted into pail closets. One, the large cesspit formerly existing at Paul Churchtown Board School, has been during the year filled in, and a system of pail-closets introduced. In my Special Report of September 3rd, 1892, I pointed out that these closets need (1) ventilation, (2) rain trough over the door, (3) a receptacle for urine. I have since informed your Board that these closets are at present a nuisance. The nuisance remains untouched at the present moment.

In the same Report I alluded to the conditions existing at Mousehole Wesleyan School, where the closets are dark, unventilated, insufficiently flushed, and discharge their contents into an open water-course which runs down from Paul through Mousehole. I would point out that under the provisions of the Rivers' Pollution Prevention Act, 1876, this method of discharge is distinctly illegal.

As to the general question of the sanitary condition of these and other public school closets, situated on premises on and about which hundreds of children spend a large part of their days, it is, I would point out, at all times a matter of first rate importance. At the present time, with the possibility of cholera invasion, the matter becomes one of urgent public concern. Pail-closets must be immediately substituted for the present dangerous system at Mousehole School. As to the Newlyn Board School cesspit, I have examined it on several occasions and always found it in an unsatisfactory condition. A special effort should be made at this time to abolish these insanitary arrangements in favour of the cleaner and more manageable pail-system. As mentioned in my last Annual Report, a pail-system is already established on the girls' side at the Newlyn Wesleyan School, and is found to answer well. The old cesspit on the boys' side still however exists. I understand the delay in conversion here is due to pecuniary

considerations, but seeing the importance, in view of a possible cholera epidemic, of having a form of closet whose contents can be readily removed and thoroughly disinfected I strongly recommend your Board to urge immediate action on those responsible.

Scavenging.

A scavenging cart has been during this year provided by your Board. It commenced work in September, and has since visited daily all parts of Newlyn, with the exception of such streets and courts as owing to their narrowness it has been impossible to enter. It is being used by a large and increasing proportion of the inhabitants, and a gratifying decrease of rubbish-heaps is to be noted. A marked exception to the generally improved condition of Newlyn is the state of the cliff-side at and near the top of the Slip, especially at a spot opposite the small court which there has exit into Fore Street. Tolcarn Stream and the County Drain are considerably less polluted than formerly. The scavenging process still requires supplementing by the fixing of fit public receptacles at spots beyond which the cart is unable to advance (*v. Report, June 10th, 1892*).

Mousehole continues to be without adequate scavenging arrangements.

Bakehouses, Slaughterhouse, Daries, Cowsheds, and Milkshops.

During the year six bakehouses have been inspected and, with the exception of one already referred to, have been found in fairly satisfactory condition. I know of but one slaughterhouse in the district, situated at Newlyn, where, I am told, usually one animal a week is killed. I have visited it periodically, at the time of killing and at other times, and have found it well kept and reasonably adapted for the purpose. Two milkshops at Newlyn have been inspected. In the case of one, I was not altogether satisfied as to its cleanliness or adaptation for the purpose. I recommend to your Board the registration of bakehouses, slaughterhouses, daries, cowsheds, and milkshops.

Special Visits in connection with cases of Infectious Disease arising. Typhoid Fever.

On February 29th on report of a case of typhoid fever in the house of Mr. Kelynack, Gwavas Quay, Newlyn, I visited this and adjoining premises, and found that all possible precautions against the spread were being taken. The patient, Frances S. Kelynack, aged 3, subsequently died here on the 16th of March. Visits of mine on May 23rd and on June 1st to cases of typhoid fever at Mousehole and Newlyn respectively, with comments thereon, have already been made the subjects of a Special Report presented on June 10th. The case at Mousehole was a sequel to the first case at Newlyn, occurring in the person of the deceased child's mother, who had since moved thither. To these cases, as pointed out in my Special Report, I was unable to attribute any other cause than the filthy condition of the neighbourhood from want of scavenging. In each case I only received information of the existence of the disease on the registration of the death of the patient, and in each case, it is instructive to remember, no precautions against spread were taken—indeed the fæces, the vehicle of contagion, were thrown into the water-courses outside the houses of the patients.

A visit to a fourth case at Wesley Court, Mousehole, on June 21st, with comments thereon, was the subject of another Special Report on June 25th. This case was therein attributed to filth-heaps abounding near, and to "a badly laid surface gutter, choked with slime." The heaps were speedily removed, and the gutter cleaned, but it has never been re-laid, and the condition soon recurred and exists at the present time. I have since this visit called your attention to the general condition of the court. In a report of September 3rd, I wrote "Immediate attention must be given to the drains in Wesley Court, Mousehole." Nothing has however been done. On visiting it on the 9th January, 1893, I made the following note:—"The drains throughout this court are in fragments and without system. The surface is studded with pools of slop water, and the drains universally choked."

On August 20th, on report of a case of "fever" in a house occupied by Mrs. James, the Fradgan, Newlyn, I visited the premises and found two adults and two other children sharing with the sick child one bedroom, the one other bedroom in the house being sublet to a lodger! Two children within this household had already perished of "fever" during the last twelve months. I directed the attention of the Inspector to the case, and the overcrowding was somewhat reduced by the sleeping out of one of the children. I am glad to be able to add that the invalid boy subsequently recovered.

On September 11th, on report from Inspector of case of typhoid fever in household of Mrs. Trenoweth of Trevithal, Paul, I visited this and adjoining premises. I noted four large heaps of refuse (mixed dung, house rubbish, &c.) close to the infected house. I also found that disinfection was not being properly carried out. I advised the family as to the necessary precautions and ordered the Inspector to get the heaps removed. On re-visiting the premises on September 20th I found that my instructions had been in all particulars fulfilled. The patient made a good recovery.

A case of Scarlatina.

On December 9th, on a report of a case of scarlatina (Everett Wills, aged 7), in the house of his mother at Jack Lane, Street-an-nowan, Newlyn, I visited the infected house. Scarlatina, spreading from Penzance, had recently reached Tolcarn, a case having occurred within a little distance on the other side of the Tolcarn stream. I attributed the Wills case to direct further extension along the same line. Enquiry into the milk supply gave a negative result. I learnt that the boy, who had been taken ill three days before my visit, had attended the Wesleyan School at Newlyn up to the date of his attack. I also discovered that the Mistress in charge of the Infant Department at the same school had been lodging on the same premises during the first two days of the boy's illness. I immediately called and explained the matter to the Rev. T. H. Love, Secretary to the Wesleyan School, with the result that the Mistress was at once granted leave of absence from her duties until after the Christmas holidays, I satisfied myself that the child was being as nearly as possible isolated and at once saw the Inspector, who delivered a copy of our printed "Rules in Infectious Disease," arranged for the periodical disinfection of linen, and has the case (which is progressing favourably) at present under his supervision. The sick-room will be disinfected in due course.

I have not heard of any fresh cases of scarlatina within the district. The above are the only cases of infectious disease that have been brought to my knowledge during the past year.

Adoption and publication of I.D.N. Act, '89. Provision of disinfectants, and of "Rules for Guidance in Infectious Disease." Method of dealing with future cases. Recommendation as to certain infected articles.

Your Board is to be congratulated on having adopted the Infectious Diseases Notification Act, 1889, at its meeting on December 6th, 1892. I note that the provisions of the Act have been published throughout the district, and that the Act comes into operation on January 16th, 1893. The purchase of a stock of disinfectants, in accordance with my recommendation of September 3rd, has given us the means of lessening the chances of spread from each case, and the circulation of our "Rules for Guidance in Infectious Disease," printed by order of the Board, dated October 3rd, 1892, will, it is hoped, contribute to the same result. Henceforth cases of infectious disease within the district will be at once made known to me. I shall thereupon immediately visit the infected premises, and shall endeavour to ascertain the source of contagion in each case. I shall at the same time advise as to the means of ensuring the

nearest approach to isolation possible. I shall also at once inform the Inspector, who will visit without delay, and will hand a copy of our "Rules" to those in charge of the patient. He also, acting under my instructions, will supply necessary advice and disinfectants, arranging for the periodical disinfection of bed and body-linen, &c., and for the ultimate disinfection of the room, bedstead, furniture, utensils, &c. I have already provided him with clear written general instructions in this matter, which I shall supplement to meet special emergencies that may arise. As to the question of bulky articles, wearing apparel, blankets, mattresses, I strongly recommend that they be burnt when necessary, and that full compensation be given in the case of the poorer inhabitants. I shall notify the head-teachers of schools of any cases of infectious disease that may arise among their pupils or teachers, or in the households in which such pupils or teachers live, and shall notify them again when the period of probable infection is considered to be at an end. I would ask them for their part in the interests of public health to prevent children coming to school from infected houses between the dates of such first and final notifications.

The adoption of I.D.P. Act, '90 and of P.H.A.A. Act, '90 and compliance with D.C. and M. Order, 1885—'86 recommended.

I strongly recommend to your Board an immediate consideration of the valuable provisions of the Infectious Diseases Prevention Act, 1890, and of the Public Health Acts Amendment Act of the same year. It will then be seen how necessary their adoption is, and how much such action will strengthen our hands in our efforts to prevent the origin and spread of infectious diseases. For the same reason effect should be given without delay to the Dairies, Cowsheds, and Milkshops Order, 1885 and 1886.

Need of Bye-laws within the district.

The non-existence of proper of bye-laws within our district amplifying the various statute laws concerning public health is a regrettable fact. I understand that such have been submitted to the consideration of the Local Government Board. It is much to be hoped that their official sanction will not be long delayed. On the whole question of bye-laws, see 53 & 54 Vict. c. 49.

Special Reports made to Board during 1892.

Besides the reports already mentioned above, others made by me during the past year have been—(No. 3) a report (made May 9th) recommending the cleaning of Tolcarn riverbed then and periodically thenceforth, and its immediate and occasional flushing by opening communication with the leat above; (No. 4) a Special Report dealing with precautions necessary against cholera (presented on Sept. 3rd). No Special Reports have been during the year required at my hands by the Local Government Board.

Vital Statistics for 1892. See Tables enclosed.

I now ask your attention to the Vital Statistics (in tables marked A and B) enclosed. Here it will be seen that the total number of births within the district during 1892 amounted to 187, of deaths to 84—a natural increase, proportionately large, to the extent of 103 persons. Of the births 91 were male, 96 female; of the deaths 35 were male, 49 female. These last figures are interesting, as they show both in births and deaths an absolute reversal of the sex-proportions as registered in the country generally. In the matter of deaths the anomaly is especially conspicuous. The birth-rate expressed in terms per 1000 per annum equals 31.37, the death-rate 14.09. The first is rather high, the second satisfactorily low.

The deaths arranged according to sub-localities are :—

	Population.				Deaths.			Death Rates.	
NEWLYN	...	3,323	...	...	45	...	...	13.54	
MOUSEHOLE	...	1,602	...	...	20	...	...	12.48	
REST OF DISTRICT		1,036	...	...	19	...	...	18.34	
	Totals	5,961	...	...	84	...	...	14.09	

The zymotic deaths were—3 from typhoid and 3 from infantile diarrhoea—total 6, making zymotic death-rate 1.006 per 1000—fairly low. There were 4 deaths in January from Influenza and 1 in February—total 5. There were 5 deaths from cancer. It will be remembered that 1 only from this cause was recorded as occurring during the last five months of 1891.

The deaths under 1 year of age amount to 20, making the infant mortality 106.95. I suspect that this will be found to compare very favourably with that of the adjoining districts, and with that of the country generally.

Comparison of Rates for last 5 months of 1891 with those for Corresponding period of 1892, and of Deaths and Death Rates in the separate localities.

The above figures all show to advantage when placed side by side with those recorded for last year. The estimations of last year were based exclusively on the figures of the last five months (the period covered by my tenure of office). A comparison of these with those for the last five months of the present year will be found even more favourable to the latter. Thus, the various rates for the last five months of 1891 and of 1892, expressed in terms per 1000 per annum are :—

Last 5 months of		Birth Rate.		Death Rate.		Infantile Death Rate.		Zymotic Death Rate.
1891	...	24.5	...	18.9	...	164	...	5.23
1892	...	28.18	...	8.45	...	114.3	...	8.

The deaths and general death rates for the same periods (last 5 months of 1891 and 1892), arranged according to sub localities are :—

Population.				Deaths.			Death Rates.	
				Last 5 months of			Stated as per 1000 per annum.	
				1891	1892		1891	1892
NEWLYN	...	3,323	...	24	13	..	17.33	10.38
MOUSEHOLE	...	1,602	...	11	4	...	16.46	5.97
REST OF DISTRICT		1,036	...	12	4	...	27.79	9.26
	Entire District	5,961	...	47	21	...	18.91	8.45

It is fair to remember that 10/13 of the zymotic death rate for 1891 was due to an epidemic of Measles, the other cases consisting of 1 death from Diphtheria at Newlyn, 1 from Typhoid at Newlyn, and 1 from Infantile Diarrhoea at Mousehole. The only zymotic deaths during the same months of 1892 were two from Infantile Diarrhoea at Mousehole. Now the last-named 3 diseases are, more than any others, known to be influenced, if not actually caused, by insanitary surroundings due to non-removal of excreta, and it is significant that Newlyn has no record of death from either of them during the last 5 months of the year 1892, the period contemporaneous with improved scavenging and the daily work of the new Cart.

Necessity of ceaseless vigilance and of prompt and decisive action in dealing with insanitary conditions.

This is so far gratifying, but I would remind you that the war of sanitation is a

never-ending one, and that the price of public health (as that of liberty) is eternal vigilance. In view of the possibility of an invasion of Cholera it is now more than ever incumbent on us to strengthen the weak points in our armour. I would once more direct your attention to the privy arrangements in the various schools within the district, to the necessity of giving protection to the wells, and to the condition of Wesley Court, Mousehole, and I would urge on you the imperative necessity of adopting prompt and decisive measures in dealing with all nuisances and insanitary conditions that have been, or may be, brought to the notice of your Board.

I am, Gentlemen,

Faithfully yours,

RICHARD DAVEY BOASE

M.O.H. PAUL U.S.D.

5, MORRAB ROAD,

PENZANCE,

January 12th, 1893.

